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John Murtagh

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JACOBSON HOLMAN PLLC  
400 SEVENTH STREET N.W.  
SUITE 600  
WASHINGTON, DC 20004

EXAMINER

FARAGALLA, MICHAEL A

ART UNIT

PAPER NUMBER

2617

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/696,553	<b>Applicant(s)</b> MURTAGH ET AL.	
	<b>Examiner</b> MICHAEL FARAGALLA	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This action is in response to the amendment filed by applicant on 11/24/2008. This action is made **FINAL**.

#### ***Response to Arguments***

2. Applicant's arguments with respect to claims 15-32 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-18, 20-22, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Marin et al (Patent number: US 6,298,232)** in view of **Comer et al (Patent number: US 6,856,808)**.

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Consider Claims 15 and 26, Marin et al show a method, as well as a mobile network node for delivering a short message from a foreign mobile network to a user or application server in a home mobile network, the home and foreign networks operating with non-compatible protocols, the method comprising the steps of:

- (a) As SC/GMSC of the foreign network querying a pseudo HLR in the home network, said pseudo HLR operating with the protocol of the foreign network, to determine a serving MSC (see figure 5; column 4, lines 50-67; column 5, lines 1-20); (the foreign network is read as the GSM network which is sending an SM to the IS-41 based network which is read as the home network).
- (b) The pseudo HLR providing to the foreign network SMSC an address of a pseudo MSC in the home network, said pseudo MSC operating with the protocol of the foreign network (see figure 5; figure 6B); (in step 645 the visited network subscriber No. and location information is retrieved on order to forward the SMS message).
- (c) The foreign network SC/GMSC routing the message to the pseudo MSC (see figures 5, and 6B).
- (d) A mobile network node in the home network performing protocol conversion of the message to an access protocol and routing the message using said access protocol to a receiving node in the home network (see figure 5); (in order to route a message from one network that uses one protocol to a network that uses another protocol, protocol conversion is needed).

However, Marin et al shows SC/GMSC but does not specifically show SMSC.

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In related art, Comer et al show SMSC (see figure 1; figure 3; column 1, lines 30-50); (the SMSC can be installed in multiple networks in order to support SMS messaging).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Comer et al into the teaching of Marin et al in order for the SMSC to interface with the currently popular digital cellular systems (see Comer et al; column 1, lines 32-45).

Consider Claim 32, Marin et al show a mobile network node adapted to deliver a short message from a foreign mobile network to a user or application server in a home mobile network, the home and foreign networks operating with non-compatible protocols, the mobile network node being adapted to reside in the home network and comprising a pseudo HLR operating with the protocol of the foreign network and a pseudo MSC operating with the protocol of the foreign network, and the mobile network node being adapted to perform the steps of:

(a) As SC/GMSC of the foreign network querying a pseudo HLR in the home network, said pseudo HLR operating with the protocol of the foreign network, to determine a serving MSC (see figure 5; column 4, lines 50-67; column 5, lines 1-20); (the foreign network is read as the GSM network which is sending an SM to the IS-41 based network which is read as the home network).

(b) The pseudo HLR providing to the foreign network SMSC an address of a pseudo MSC in the home network, said pseudo MSC operating with the protocol of the foreign network (see figure 5; figure 6B); (in step 645 the visited network subscriber No. and location information is

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retrieved on order to forward the SMS message).

(c) The foreign network SC/GMSC routing the message to the pseudo MSC (see figures 5, and 6B).

(d) A mobile network node in the home network performing protocol conversion of the message to an access protocol and routing the message using said access protocol to a receiving node in the home network (see figure 5); (in order to route a message from one network that uses one protocol to a network that uses another protocol, protocol conversion is needed).

(d) Wherein the mobile network node is adapted to generate an error code including error codes indicating network resource shortage, destination out of service, message termination denied, and network failure (see figure 12; column 8, lines 53-67; column 9, lines 1-10).

However, Marin et al shows SC/GMSC but does not specifically show SMSC, and that the mobile network node is adapted to perform address translation.

In related art, Comer et al show SMSC, and that the mobile network node is adapted to perform address translation (see figure 1; figure 3; column 1, lines 30-50; see also figure 2); (the SMSC can be installed in multiple networks in order to support SMS messaging).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Comer et al into the teaching of Marin et al in order for the SMSC to interface with the currently popular digital cellular systems (see Comer et al; column 1, lines 32-45).

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Consider Claim 16, Marin et al show a method as claimed in claim 15, wherein the receiving node is a home network SMSC and the method comprises the further step of the home network SMSC routing the message to a destination user or application server (see figure 5; column 3, lines 10-25); (voice messages are forwarded to mobile terminals in the recipient network).

Consider Claims 17 and 29, Marin et al show a method as claimed in claim 15, as well as the mobile network node of claim 26, wherein the receiving node is an inter-working gateway, and said inter-working gateway routes the message to a home network SMSC and the home network SMSC routes the message to a destination user or application server (see figures 5 and 11).

Consider Claims 18 and 27, Comer et al show a method as claimed in claim 15, as well as the mobile node of claim 26, wherein the receiving node is an SMS application server (see figure 1; figure 3; column 1, lines 30-50); (the SMSC can be installed in multiple networks in order to support SMS messaging).

Consider Claims 20 and 28, Marin et al show a method as claimed in claim 15, as well as the mobile network node of claim 26, wherein the pseudo HLR and the pseudo MSC communicate with the foreign network SMSC via a signaling network (figures 5 and 11).

Consider Claim 21, Comer et al show a method as claimed in claim 20, wherein the signaling network is an SS7 network (see column 6, lines 55-67; column 7, lines 1-10).

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Consider Claim 22, Marin et al show a method as claimed in claim 15, wherein the pseudo MSC terminates the message delivery attempt by sending an acknowledgement to the foreign network SMSC (see figure 5).

Consider Claim 30, Marin et al show a mobile network node as claimed in claim 26, wherein the mobile network node is adapted to generate an error code including error codes indicating network resource shortage, destination out of service, message termination denied, and network failure (see figure 12).

Consider Claim 31, Comer et al show a mobile network node as claimed in claim 26, wherein the mobile network node is adapted to perform address translation (see figure 2).

5. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Marin et al (Patent number: US 6,298,232)** in view of **Comer et al (Patent number: US 6,856,808)** and further in view **Vogel et al (Publication number: US 2002/0077786)**.

Consider Claims 23-25, Marin et al show a method as claimed in claim 15, wherein:

(a) The receiving node is an inter-working gateway, and said inter-working gateway routes the message to a home network SMSC and the home network SMSC routes the message to a destination user or application server (see figure 5; column 4, lines



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50-67; column 5, lines 1-20); (the foreign network is read as the GSM network which is sending an SM to the IS-41 based network which is read as the home network).

(b) The mobile network node operates as a pseudo SMSC adapted to operate with the protocol of the foreign network when communicating with the foreign network and with an access protocol when communicating with elements of the home network, and said pseudo SMSC sends the message to the inter-working gateway using the access protocol (see figures 5 and 11).

However, Marin et al do not specifically show that the pseudo SMSC, in case of delivery failure due to a temporary condition, performs a retry of sending the message to the inter-working gateway and receives a delivery acknowledgement.

In related art, Vogel et al show that the pseudo SMSC, in case of delivery failure due to a temporary condition, performs a retry of sending the message to the inter-working gateway and receives a delivery acknowledgement (see paragraph 88).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Vogel et al into the teaching of Marin et al and Comer et al in order to deliver the message successfully (see ogle et al; paragraph 88).

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Marin et al (Patent number: US 6,298,232)** in view of **Comer et al (Patent number: US 6,856,808)** and further in view **Smith et al (Publication number: US 2003/0069031)**.

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Consider Claim 19, Marin et al in view of Comer et al show the method as claimed in claim 15, but fail to specifically show that the access protocol is SMPP.

In related art, Smith et al shows that the access protocol is SMPP (see paragraphs 38 and 39).

Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the teaching of Smith et al into the teaching of Marin et al and Comer et al in order to communicate with a message distribution center (MDC) (see Smith et al; abstract).

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL FARAGALLA whose telephone number is (571)270-1107. The examiner can normally be reached on Mon-Fri 7:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617  
03/25/2009

/Michael Faragalla/  
Examiner, Art Unit 2617